UNECE Convention on Long-range Transboundary Air Pollution

Working Group on Effects

International Cooperative Programme on Modelling and Mapping (ICP M&M)
of Critical Levels & Loads and Air Pollution Effects, Risks and Trends

Final Draft Agenda

18th CCE Workshop
on the assessment of nitrogen effects

Monday 21 – Wednesday 23 April 2008

24th Task Force Meeting
Thursday 24 – Friday 25 April 2008

Berne, Switzerland

Sponsored by:
Swiss Federal Office for the Environment
and
German Ministry for the Environment, Nature Conservation and Nuclear Energy,
German Federal Environment Agency
Dutch Ministry of Housing, Spatial Planning and the Environment,
Coordination Centre for Effects (CCE) at PBL,
The LIFE III Programme
Monday, 21 April 2008

Opening of the 18th CCE workshop and Key Note Session

Chair: Beat Achermann

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>Registration and coffee</td>
<td>K. van Doremalen</td>
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<tr>
<td>10.00</td>
<td>Welcome by</td>
<td>Dr. Martin Schiess, Head of the Air Pollution Control Division of the Swiss Federal Office for the Environment</td>
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<td></td>
<td>Welcome by</td>
<td>Dr. Richard Ballaman, Chairman of the Working Group on Strategies and Review (WGSR) of the LRTAP Convention</td>
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<tr>
<td>10.15</td>
<td>Objectives of the CCE workshop and Task Force Meeting</td>
<td>J.-P. Hettelingh and T. Spranger</td>
</tr>
</tbody>
</table>

Key Note Session

10.30 Proposed method for estimating critical loads for nitrogen based on biodiversity using a fully integrated dynamic model - testing in Switzerland and Sweden.  
Harald Sverdrup, Salim Belyazid, Sabine Braun, Dani Kurz, Beat Rihm

11.15 Monitoring and experimental data related to the modelling sites.  
Sabine Braun, Salim Belyazid

11.45 ForSAFE-VEG: Going regional  
Dani Kurz, Beat Rihm, Salim Belyazid

12.15 Discussion

12.30 Lunch

18th CCE-WS: Topic 1: ICP M&M Call for data: results and progress

Chair: Jean-Paul Hettelingh

<table>
<thead>
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<th>Time</th>
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<tbody>
<tr>
<td>13.30</td>
<td>Results of the call for data: critical loads</td>
<td>Jaap Slootweg</td>
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<tr>
<td>14:15</td>
<td>Results of the call for data: Dynamic modelling</td>
<td>Max Posch</td>
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<tr>
<td>15:00</td>
<td>Ensemble Assessment of Impacts and other issues regarding the possible policy use of the 2008 European Critical Load database</td>
<td>Jean-Paul Hettelingh</td>
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</table>

Discussion

15.30 Break
18th CCE Workshop and 24th Task Force Meeting of the ICP Modelling and Mapping, 21-25 April 2008, Hotel Kreuz, Berne, Switzerland.

16.00  Discussion
16.20  Critical loads and dynamic modelling on soils and waters in Sweden – approach, consistency of model results and policy implications  Filip Moldan
16.40  Uncertainties in critical loads in view of data and criteria  Gert Jan Reinds
17.00  Updating critical loads of China using an extended steady state function  Duan Lei
17.20  Discussion
17.30  Adjourn

18th CCE-WS: Poster Session
Do not hesitate to bring and expose (non-) registered poster material

Tuesday, 22 April 2008

18th CCE-WS: Topic 2: (Empirical) critical loads and effects of N deposition  Chair: Bridget Emmett

9.30  How responsive are alpine plants and communities to increased nitrogen deposition  Erika Hiltbrunner
9.50  Assessing changes of plant species richness using empirical critical loads  Roland Bobbink
10.10  Empirical critical loads for nitrogen for terrestrial and aquatic ecosystems in the US  Linda Pardo
10.30  Empirical and simulated critical loads for N deposition in California mixed conifer forests  Mark Fenn
10.50  Coffee break
11.15  Analyzing and modeling the effects of nitrogen deposition on plant species diversity in Northeast German forests  Martin Jenssen
11.35  Uncertainty associated with critical load exceedance across Europe (incl. elements on metadatabase, vegetation surveys and N-impacts)  Kevin Hicks
11.55  Discussion
12.30  Lunch

18th CCE-WS: Topic 3: Dynamic modelling, air pollution effects on biodiversity  Chair: Filip Moldan

14.00  Application and testing of the VSD model in the UK  Chris Evans and Jane Hall
14.20  Dynamic modeling of multiple effects of geochemical and climate change on biodiversity on a regional scale  Angela Schlutow

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14.40 Relations between critical loads exceedance and species loss  
Arjen Hinsberg

15.00 Tentative VSD applications on the European Back Ground database  
Max Posch

15.20 Discussion

15.30 Break

16.00 Discussion (continued)/ poster presentations / other spontaneous short presentations

17.00 Adjourn

**Conference Dinner**

Bus leaves from Hotel Kreuz at 18.30 hrs.

Return to hotel: 23.30 hrs.

**Wednesday, 23 April 2008**

**18th CCE-WS: Topic 4: Uncertainty including air pollution effects under climate change**  
*Chair: Maximilian Posch*

9.30 Critical loads/levels in view of multiple interactions: effects of 4 years of combined elevated N and O_3 deposition on species-rich subalpine pasture  
Seraina Bassin

9.50 Assessment of climate and air quality change effects on forest ecosystem services in Europe  
Gert Jan Reinds

10.10 Possible air pollution effects on forest ecosystems under climate change  
Katarzyna Juda-Rezler

10.30 Evolution of atmospheric deposition in forest ecosystems from Romania between 1998-2006  
Carmen Iacoban

10.50 Nitrogen deposition estimates: comparing EMEP and German assessments  
Thomas Gauger

11.10 **Summary of CCE Workshop findings for the Task Force of the ICP M&M (incl. short discussion)**  
Jean-Paul Hettelingh

11.30 **Closure of CCE workshop**

**Excursion to open-air museum Ballenberg**  

Bus leaves from hotel Kreuz at 12.15
## Registered Posters:

<table>
<thead>
<tr>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Dynamic Modelling, air pollution effects on biodiversity under climate change in Bulgaria</td>
<td>Borisova Borislava</td>
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<tr>
<td>Application of data mining techniques to extract information from environmental databases</td>
<td>Marko Debeljak</td>
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<tr>
<td>Temporal evolution of critical loads of acidifying pollutants and heavy metals induced by base cations deposition changes in Bulgaria</td>
<td>Nadia Ignatova</td>
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<tr>
<td>First experience of critical loads calculation and dynamic modelling in Slovenia</td>
<td>Milan Kobal and Klemen Eler</td>
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<td>The MAGIC library – a way of upscaling dynamic modelling results</td>
<td>Veronika Kronnäs</td>
</tr>
<tr>
<td>The main problems of dynamic modelling and critical load applications in Belarus</td>
<td>Natallia Lysukha</td>
</tr>
<tr>
<td>Title to be confirmed</td>
<td>Alessandra de Marco</td>
</tr>
<tr>
<td>Update of critical loads and dynamic modelling calculations - the Polish 2008 submission to CCE</td>
<td>Wojciech Mill and Adrian Schlama</td>
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<tr>
<td>Critical loads of heavy metals for Poland related to human health effects and ecosystem functioning</td>
<td>Wojciech Mill and Adrian Schlama</td>
</tr>
<tr>
<td>Climate change impact on critical loads of acidity and eutrophication of Polish ecosystems</td>
<td>Wojciech Mill and Adrian Schlama</td>
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<tr>
<td>Coupling of water fluxes and mercury fluxes in boreal forest soil runoff during climate episodes</td>
<td>Marcus Meilli</td>
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<tr>
<td>Empirical and computed critical load data for terrestrial ecosystems in Germany</td>
<td>Hans-Dieter Nagel</td>
</tr>
<tr>
<td>Has global environmental pollution resulted in lead accumulation in soils of the Low Volga region of Russia since the Bronze Age?</td>
<td>Tatiana Pampura</td>
</tr>
<tr>
<td>Revised data set for critical loads calculating and dynamic modeling: the Russian 2008 submission to CCE</td>
<td>Irina Priputina</td>
</tr>
<tr>
<td>Atmospheric deposition and ozone levels in Swiss forests: are critical values exceeded? Results from the Swiss long-term forest ecosystem research programme</td>
<td>Marcus Schaub</td>
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<tr>
<td>Applying the landcover map of the SEI for assigning critical loads to ecosystems in the Czech Republic</td>
<td>Irena Skorepova</td>
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<tr>
<td>Critical loads for nitrogen in the Crimean region of Ukraine</td>
<td>Helena Yevstafyeva</td>
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<tr>
<td>Use of critical loadings for forecasting influence for an environment and at definition of places of accommodation of biofuel power station</td>
<td>Vadzim Zubrytski</td>
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<tr>
<td>The updated results of calculation and mapping S and N critical loadings for Belorussian ecosystems</td>
<td>Vadzim Zubrytski</td>
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</tbody>
</table>

**Please, do not hesitate to bring (non-registered) posters to present your work!**
Thursday, 24 April 2008

24th Task Force Meeting of the ICP M&M

1. Opening and Introduction

9.00 Introduction Till Spranger
  - Overview of meetings, activities and reports 2007 - 2009, and future plans
  - Aims of the meeting
  - Method of work
  - Adoption of the agenda
  - Adoption of the 2007 Minutes

9.15 Review of recent developments under the Convention and recommendations of the 26th Session of the WGE and the 25th Session of the Executive Body for the Convention
  Tor Johannessen (WGE Chairman) and Matti Johannson (CLRTAP Secretariat)

2. Cooperation with other ICPs and EMEP

9.30 Information on the European Consortium for Modelling Air Pollution and Climate Strategies (EC4MACS) project funded by the EC-LIFE III programme.
  Jean-Paul Hettelingh

9.45 Statements of other ICPs on collaboration with ICP M & M
  ICP Integrated Monitoring: Maria Holmberg
  ICP Waters: Berit Kvaeven
  ICP Vegetation: Harry Harmens.
  JEG on Dynamic Modelling Filip Moldan

Discussion and decisions on common items, especially
(a) extension of databases of M&M NFCs with data from national sites of other ICPs as appropriate;
(b) increased application of M&M methodologies by NFCs of other ICPs;
(c) draft CLRTAP “Guidelines” for reporting on the monitoring and modelling of effects of air pollution (text was E-distributed to all).
There will be a short introduction in addition to the distributed material regarding item c.

11.15 Break

3. Report on country activities since the 23rd meeting

11.50 Critical loads in the US: current activities and future plans
12.10 Critical loads and emission reduction policies in China
   Linda Pardo

12.30 other NFC presentations on national or regional activities (if not in CCE WS)
   Duan Lei

Discussion of NFC cooperation especially activities in Eastern Europe, Caucasus and Central Asia; Conclusions, Recommendations, Decisions
   N.N.

13.00 Lunch break

4. Heavy Metals

14.00 Progress on Heavy Metals; Report from the Workshop on Critical Loads of Heavy Metals, United Kingdom, November 2007
   Gudrun Schütze

Tour de Table on NFC activities recommended in 2007

14.15 Conclusions, Recommendations, Decisions

5. Critical loads and dynamic modelling, especially:
   Results of the call for data

14.30 Results of the 18th CCE Workshop
   - Status empirical and computed CLOs, dynamic modelling,
   - Status land cover data,
   - Status uncertainty and robustness,
   Jean-Paul Hettelingh

14.50 Discussion and implications for the M&M work plan (including use of data in Gothenburg Protocol revision):

See preparation sheet on this item!

Conclusions, Recommendations, Decisions

15.20 Proposals for the further use of the CCE Background database, including the context of the treatment of robustness of impact assessments
   Jean-Paul Hettelingh et al.

15.40 Discussion

16.00 Break

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6. Assessment of nitrogen effects including links to other policy areas

16.30 Results of the 18th CCE Workshop
   - Modelling N effects, especially on biodiversity
     Jean-Paul Hettelingh

16.40 Results of the Workshop on Integrated Assessment Modelling of Nitrogen (28-30 November 2007) and Work Programme of the CLRTAP Task Force on Reactive Nitrogen and the European Nitrogen Assessment
     Matti Johansson, Till Spranger et al.

17.10 Adjourn

Friday, 25 April 2008

6. Assessment of nitrogen effects including links to other policy areas (continued)

9.00 Tour de Table on NFC activities on Nitrogen:

See 2007 Minutes and preparation sheet on this item!

9.30 Discussion of M&M role in various nitrogen activities; implications for the ICP M&M Workplan
   Decisions, Conclusions, Recommendations

7. Reporting and Workplan

Presentations and discussion:

10.00 Use of critical load exceedance as indicators (EUROSTAT, EEA etc.)
     Jean-Paul Hettelingh et al.

10.15 ICP M&M Website, other publications
     Hans-Dieter Nagel et al.

10.30 Presentation and discussion of
     1) the draft WGE 2009 Work plan
     2) planned M&M activities
     Till Spranger et al.

10.50 Draft ICP M&M contribution to the WGE Joint Report
     Till Spranger et al.

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11.10  Technical documents for the 27th WGE session, CCE Status Report

Jean-Paul Hettelingh

8.  Other business

11.30  • Future meetings, incl. workshops
• Adoption of the draft minutes of the meeting
• Next meeting, back to back with CCE workshop

12.00  Closure of the ICP M&M Task Force meeting

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